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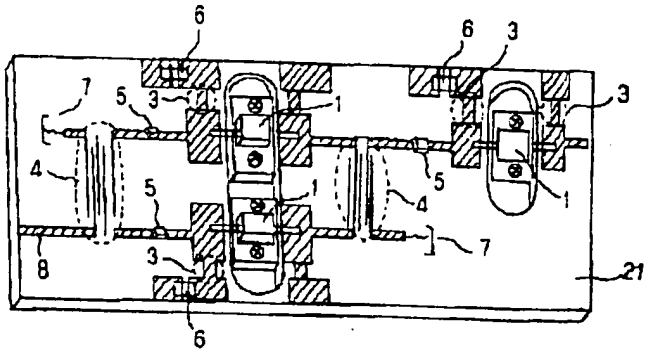
TITLE : MICROWAVE AMPLIFIER CIRCUIT, DIELECTRIC SUBSTRATE RAW MATERIAL AND MICROWAVE AMPLIFIER CIRCUIT COMPONENT



ABSTRACT : PROBLEM TO BE SOLVED: To relax dispersion in fine pattern parts or to enable a circuit configuration, which can not be provided because of a limit in production, by making a dielectric constant at one part of a dielectric substrate corresponding to a circuit at the prescribed portion of a microwave amplifier circuit selectively different from the other portions.

SOLUTION: The height of a transistor 1 matches by cutting the side of a substrate 21 the lead height of this transistor 1. Since the height of the transistor 1 is about 2 mm, when VSWR or the like is considered, a plane structure is suitable for the lead height and the connecting surface of the substrate 21. The dielectric constant of portions corresponding to a choke pattern part 3 and a distributor/synthesizer 4 on the substrate 21 is made lower than the other spot so as not to affect performance dispersion. Namely, the dielectric constant is selectively made different. In order to selectively lower the dielectric constant, the substrates of different dielectric constants are integrated while impregnating resins.

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